

ARIZONA WORKFORCE Q&A

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Labor Force

Unemployment Rate

&

Current Population Survey

Revision

Frequently, the Arizona Department of Commerce, Research Administration provides a brief description of terminology and topics discussed in the monthly Arizona Workforce Employment Report. The monthly articles have been compiled in this publication as a service to our clients.

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Two Surveys Used in Employment Report Capture Distinct Data

The monthly *Arizona Workforce Employment Report* presents data from two distinct monthly surveys — a derivation of the national Current Population Survey (household survey), and the Current Employment Statistics survey (establishment survey). The former tracks labor force data of individuals 16 years and over by place of residence, while the latter counts non-agricultural jobs (full- and part-time) by place of work, regardless the age of the worker.

Labor force and unemployment data are based on the same concepts and definitions as those used for the official national estimates obtained from the Current Population Survey (CPS), a sample survey of households that is conducted for the Bureau of Labor Statistics (BLS) by the U.S. Census Bureau. While the CPS provides the basis of monthly estimates of employment and unemployment for the country as a whole, the sample size is not sufficiently large to produce reliable monthly estimates for most sub-national areas. Instead, monthly estimates for Arizona and sub-state areas use statistical modeling. For Arizona, the Local Area Unemployment Statistics (LAUS) program (a partnership between the

Key Elements of Household, Establishment Surveys

Household Survey

- Conducted by the Census Bureau for the U.S. Dept. of Labor, Bureau of Labor Statistics
- Includes agricultural workers, the self-employed, unpaid family workers and private household workers
- Tracks work status of individuals 16 years and older by place of residence
- Has no duplication of individuals, because individuals are counted only once, even if they hold more than one job

Establishment Survey

- Conducted by Arizona Dept. of Commerce, Research Administration, in cooperation with U.S. Dept. of Labor, Bureau of Labor Statistics
- Counts most non-agricultural private and government jobs; excludes self-employed, and household and family workers
- Tracks employment by place of work, regardless of age of worker
- Counts multiple jobs of an individual, provided jobs are normally part of the survey (see above)

Source: U.S. Dept. of Labor, Bureau of Labor Statistics

U.S. BLS and Arizona Dept. of Commerce, Research Administration) estimates state and local labor force, employment and unemployment data using data from several sources, including the CPS, the establishment survey and unemployment insurance data.

The establishment survey, which is conducted by Research Administration's Current Employment Statistics (CES) program in cooperation with BLS, is drawn from private nonfarm businesses such as factories, offices, and stores, as well as federal, state, and local government entities. The establishment survey covers about 95

percent of all employment (full- and part-time), and publishes data by industry code (see North American Industrial Classification System — <http://www.census.gov/epcd/www/naics.html>)

Unlike the household survey, the establishment survey counts all jobs an individual works, provided the jobs don't fall into the following categories: agricultural employment, self-employment, unpaid family work, and private household work.

For more information on the household and establishment surveys, go to the following link on

(continued on page 2)

the BLS Web site: [http://
stats.bls.gov/news.release/
empst.tn.htm](http://stats.bls.gov/news.release/empst.tn.htm)

For more information on the Local
Area Unemployment Statistics
(LAUS) program, go to the fol-
lowing link on the BLS Web site:
[http://www.bls.gov/news.release/
laus.tn.htm](http://www.bls.gov/news.release/laus.tn.htm)

*Note: This article was originally
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issue of Arizona Workforce Em-
ployment Report.*

Labor Force Concepts Explained

The following FAQ, which includes information that is used to calculate Arizona's unemployment rate, comes from U.S. Department of Labor, Bureau of Labor Statistics. For more detailed information, visit

www.bls.gov/lau/laufaq.htm or www.bls.gov/cps/cps_faq.htm

What does the term "labor force" mean?

The labor force is made up of multiple components, including the employed and unemployed. The monthly unemployment rate is used to describe the ratio of the unemployed to the civilian labor force as a percent, providing a characteristic of the labor force.

How is the civilian labor force, unemployed, and employed defined?

The civilian labor force includes individuals in the non-institutional population classified as either unemployed or employed.

What is an unemployed person?

An unemployed person is one who had no employment during the reference week, was available and actively looking for work (except for temporary illness), and had made specific efforts to find employment (i.e., applied for jobs, sent out resumes) some time during the four-week period ending with the reference week. Individuals waiting to be

recalled to a job from which they had been laid off need not have been looking for work to be classified as unemployed. Those expressing a desire for work, but not currently looking for a job, are not included in this definition.

What are reasons for unemployment?

There are five types of unemployed persons.

Job Losers – Workers who have been laid off or fired, either temporarily or permanently.

Job Leavers – Individuals who have voluntarily left their jobs.

People Who Complete Temporary Jobs – Individuals who held jobs of a set duration.

Re-Entrants – People who left the labor force prior to starting their job search.

New Entrants – People seeking employment for the first time.

How is employed defined?

Employed people are workers who, during the reference week (the week including the 12th day of the month), (a) did any work as paid employees, worked in their own business or profession or on their own farm, or worked 15 hours or more as unpaid workers in an enterprise operated by a member of their family, or (b) were not working but who had jobs from which they were temporarily absent. Each employed person is

counted only once, even if he or she holds more than one job.

Some individuals employed part time for economic reasons may want and seek full time work, but have had to settle for part time jobs.

Who is not included in the labor force?

Not all individuals over age 16 that are not working are considered to be unemployed or are included in the civilian labor force. Individuals classified as "Not in the Labor Force," include those without employment for long periods of time. They are considered to be marginally attached to the labor force if they were available for work and had looked for a job in the past 12 months, but not in the four weeks preceding the survey. Discouraged workers are those that are not currently searching for work because they believe no jobs are or were available for them.

The Bureau of Labor Statistics survey, begun in 1940, has changed since its inception, including standardizing the week the survey is conducted and clarifying the definitions of employment, job seeking activities, and availability for work. Revisions in the Current Population Survey (CPS) have been made to define discouraged workers and those not in the labor force.

Note: This article was originally published in the May 15, 2008, issue of Arizona Workforce Employment Report.

Why Not More Detailed Data on Arizona's Employed, Unemployed?

The monthly BLS publication The Employment Situation provides more detail about who is unemployed than does the monthly Arizona Workforce Employment Report or the Arizona Workforce Informer Web site. Why isn't more demographic information available about Arizona employment and unemployment?

The Current Population Survey (CPS) is a monthly survey of households, conducted by the Census Bureau for the Bureau of Labor Statistics (BLS), which measures the national rate of unemployment. The survey provides monthly demographic detail about the unemployed, such as employment status by age and race. The CPS is the source of current information about the labor force, including the number of marginally attached persons and discouraged workers, neither of whom are counted by BLS as unemployed. Survey results are also used by the Local Area Unemployment Statistics (LAUS) program in estimating the unemployment rates for each of the states.

The national sample of households is determined according to a two-step procedure. The first step, completed once every 10 years, is the selection of geographic areas in which the sur-

vey will be conducted. In 2004, each state was divided into possible areas to be surveyed. Nationally, 824 out of 2,025 possible areas were selected for inclusion in the CPS. In Arizona, eight of 15 counties were chosen. The selection was done with consideration of economic characteristics so that the counties which were not included would be adequately represented by the ones which were.

The second step is to select households within the chosen sampling areas and to conduct the survey. Each of the chosen geographic areas is divided into census blocks. Census data for the blocks (data including race, gender, and home ownership) are reviewed, and a sample of households are selected which is most likely to provide reliable estimates.

The initial interview is conducted in person to collect information about all of the household members. Personal interviews are used because they provide the most accurate information. After the initial interview, the majority of follow-up interviews are conducted by telephone. Each household is interviewed for a total of eight months over a 16-month period. The responses are used in producing the monthly seasonally adjusted estimates.

The national survey includes approximately 60,000 households across 50 states. This is large enough to provide reliable demographic detail on a monthly basis for

the nation. Arizona's sample includes approximately 1,000 households across eight counties. This is not a large enough sample to provide accurate monthly demographic estimates comparable to those available nationally. However, averaging the results over a 12-month period improves the accuracy enough so that annual-average estimates of employment and unemployment become usable. Estimates are available for the following categories: men, women, Black or African American, Hispanic or Latino ethnicity, men by age groups, and women by age groups. The data are published annually by BLS in its publication Geographic Profile of Employment and Unemployment, which can be obtained through the following Web page: <http://stats.bls.gov/gps/home.htm>

County level CPS estimates are not available. Instead, models are used to estimate employment and unemployment at the county level. These are the estimates provided on a monthly basis by the LAUS program, and which are published in the Arizona Workforce Informer.

More detailed information about the CPS program can be obtained from the program home page: <http://stats.bls.gov/cps/home.htm>

Note: This article was originally published in the June 19, 2008, issue of Arizona Workforce Employment Report.

Revisions Needed After More Data Becomes Available

Why are the industry employment estimates revised each month?

The Current Employment Statistics (CES) estimates of employment by industry are produced in two different ways. Estimates for most of the large industries are based on a survey sample, popularly known as the establishment survey.¹

Survey data is collected on an ongoing basis by various means, including mail, telephone, Internet, and special arrangement. Payroll employment figures for most of the large statewide industries are based on this survey.

For industries which do not have adequate sample,² survey data is supplemented with other information, including estimates for the same industry from other geographic areas and trends based on historical data. The amount of weight given to historical data often depends on the size of the sample and the quality of the sample data.

In some of the smaller Arizona MSAs (e.g., Prescott, Yuma), most of the employment estimates come from models in which historical data is heavily weighted. Finally, estimates are often adjusted to ac-

count for known economic events (opening of a new store, strike) which did not appear in the sample.

Because sample collection is a continuing process, data quality usually improves by the second month as more establishments report their employment numbers. Consequently, accuracy of sample-based estimates improves.

For estimates based on models, the contribution of the sample to the model is improved, and may also be given greater weight. Additionally, more information is sometimes available regarding non-sample events. So, in general, revised CES estimates will be better than the preliminary estimates.

Why are the unemployment estimates revised each month?

Arizona statewide and sub-state unemployment numbers are produced, in cooperation with the U.S. Bureau of Labor Statistics, by ADOC Research Administration's Local Area Unemployment Statistics (LAUS) program.¹

Unemployment statistics are developed using a number of different sources, including the Current Population Statistics (CPS) survey (also known as the household survey),³ counts of unemployment claims, and the nonfarm wage and salary employment estimates from the CES program.

The second time that estimates are made for a particular month, the unemployment insurance claim counts and CES employment estimates have both been updated. The largest changes usually occur in the CES numbers.

As a rule, monthly revisions in the LAUS program are not as large as those in the CES program.

Publication of revised monthly LAUS estimates were suspended during 2006 and 2007 as a cost-saving measure and were resumed in early 2008.

1. See "Two Surveys Used in Employment Report Capture Distinct Data," page 1 of this document, for a discussion about the establishment survey and LAUS program.
2. For series published jointly by Arizona and BLS, adequacy is determined from criteria based on several considerations: the number of establishments in the sample, the size of those establishments relative to the entire industry, and the survey response rates for the sampled firms. Sample adequacy criteria are revised annually.
3. See pages 3 and 4 of this document, "Labor Force Concepts From CPS Explained, May 15, 2008, and "Why Not More Detailed Data on Arizona's Employed, Unemployed?" June 19, 2008, for further discussions about the CPS program.

Note: This article was originally published in the July 17, 2008, issue of Arizona Workforce Employment Report.

BLS, Other Factors Determine Level of Industry Detail

Who decides which industries are published for the state, MSAs and counties?

Most current government statistical series classify economic activity by using the North American Industrial Classification System, known as NAICS. This system is used to classify businesses according to their processes of production. The NAICS system was last revised in 2007 and is shared by the United States, Canada, and Mexico. In the United States, implementation is the responsibility of the U.S. Economic Classification Policy Committee (ECPC) under the direction of the Office of Management and Budget.

The NAICS system identifies each business in the United States as belonging to one of 670 industries. The system then combines these industries into broader groups. At the highest level of aggregation, there are 20 very general groups known as sectors. For example, Construction, Manufacturing, and Retail Trade are three sectors. Following a recommendation from the ECPC, the Current Employment Statistics (CES) program also uses industry groupings called supersectors, which are combinations of NAICS sectors. One example of a

supersector is Trade, Transportation, and Utilities, combining the four sectors of Wholesale Trade, Retail Trade, Transportation and Warehousing, and Utilities. Other published supersectors include Financial Activities, Professional and Business Services, Education and Health Services, and Leisure and Hospitality.

The CES program assigns a NAICS classification to each establishment based on its principal business activity. Additionally, the CES program classifies establishments according to ownership, as either private or government, and further identifies government as federal, state or local. Employment at government-owned establishments is counted in government, regardless of the NAICS classification.

The Bureau of Labor Statistics supports publication, at a statewide level, of all 20 NAICS sectors, all supersector combinations, and three government series. For MSAs with employment more than 100,000, such as Phoenix and Tucson, BLS supports publication of seven sectors, five supersector combinations, and three government series. For the smaller MSAs, two private ownership series and one government series are guaranteed.

How much additional detail is published depends upon how much employment there is in each industry

and whether an adequate sample is available for estimation. This determination is made at the end of the year and is based on how many establishments have been surveyed, how many have responded with data, and how much of each industry's employment is covered by the responding establishments. Based on this annual review, some non-required series will be estimated using the sample, some will be estimated using historical trend information and models, and some series will be eliminated. Examples of non-required published series in Arizona are Specialty Trade Contractors, Computer and Electronic Products Manufacturing, Department Stores, and Hospitals. Arizona publishes a total of 33 non-required statewide estimates, all of them official estimates published jointly by BLS and Arizona.

County employment series, other than for counties which are also MSAs (e.g., Pima, Yuma), are not official BLS series and are determined and published only by Arizona. These estimates are based on a combination of sample data and historical trends. Fewer series are published for the smaller counties because the level of employment in some series is too low for reliable estimation.

Note: This article was originally published in the Aug. 14, 2008, issue of Arizona Workforce Employment Report.

UI Claims Factor into Calculation of Unemployed

Are people who do not collect unemployment insurance counted as unemployed? How are unemployment insurance claims related to the unemployment rate?

Unemployment insurance is paid weekly to workers who are unemployed through no fault of their own and meet all other eligibility requirements established by the state and the federal government. The number of claims paid provides information about how many people are unemployed and receiving benefits.

These jobless claims can be counted in a number of ways. Initial claims are applications for benefits. Final payments are the last payments made before eligibility is exhausted (usually, after six months of payments). Continued claims are all payments made during a week, including final payments. Every Thursday, the U.S. Department of Labor publishes the total number of initial claims nationally. This information can be found on the following Web page: <http://workforce.security.doleta.gov/unemploy/>

Not everyone who is unemployed collects unemployment insurance. Anyone who is not employed and is actively looking for work is officially considered to be unemployed. This

includes people who are entering or re-entering the workforce after a period of not working and not seeking employment, people who quit their last job voluntarily or were terminated for cause, and people who did not work long enough at their last job to become eligible for unemployment insurance. Also counted as unemployed are those who have exhausted their benefits. These are all examples of people who are considered unemployed even though they are not eligible to collect unemployment insurance. Moreover, not everyone who is eligible for benefits files a claim and collects them.

There are always many more people unemployed than are collecting unemployment insurance, but changes in the monthly number of claims paid are a good indication of how the total number of unemployed is changing. About 25% of people who are unemployed are collecting UI benefits.

The statewide unemployment statistics for Arizona are estimated by the Local Area Unemployment Statistics program using three sources of information: the results of the Current Population Survey (or “household survey”), the total non-farm wage and salary employment from the Current Employment Statistics Survey, and the number of continued claims paid, according to the Arizona’s Unemployment Insurance program.

All 50 states use these same sources of information to produce their unemployment statistics, and the results

are then adjusted so that the employment and unemployment from all states will add up to the national totals. Because each state has its own rules regarding how much income claimants can earn without losing their benefits, only claims from people who had no earned income during the benefit week are counted in order to maintain consistency from state to state.

Estimates of employment and unemployment for geographic areas within the state, such as counties, require additional local information about employment, population, and unemployment insurance claims. To estimate local unemployment, the number of final payments is used to estimate how many people remain unemployed after exhausting their benefits.

Additional information about unemployment insurance and claims in Arizona, including counts of claims, demographic information, claims by industry, and graphical analysis, can be found at: <http://www.workforce.az.gov/?PAGEID=67&SUBID=222>

Details regarding Arizona’s Unemployment Insurance Benefits, including eligibility requirements, can be found at the Arizona UI Benefits home page (<https://www.azdes.gov/esa/uibenefits/uihome.asp>)

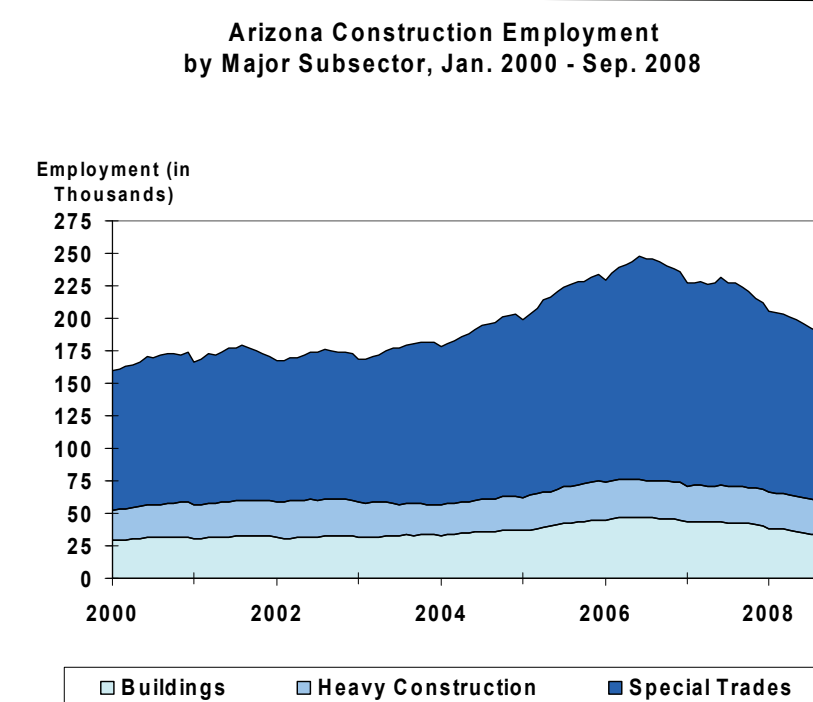
Note: This article was originally published in the Sep. 18, 2008, issue of Arizona Workforce Employment Report.

Classification of Construction Jobs Depends Primarily on Method, Place of Production

What is the basis for classifying construction firms? Why are there three different series for construction?

All of the employment series are defined according to the North American Industrial Classification System (NAICS), which groups firms together based on their method of production. In the construction sector, all of the establishments are involved either in the construction of buildings or in building infrastructure such as roads and utilities.

Most new buildings are built under the supervision of a single firm, while the smaller firms under subcontract do much of the work. Firms that oversee the whole process of constructing buildings, including all of the subcontracted work, are classified in the first industry series, Construction of Buildings. The buildings may be either residential or commercial, and the work can be either new construction or remodeling and repairing of existing structures. Most of the construction activity occurs in firms identified as Spe-



Source: Prepared by the Arizona Dept. of Commerce, Research Administration, in cooperation with the U.S. Dept. of Labor, Bureau of Labor Statistics, October 2008.

cialty Trades. These companies specialize in one aspect of construction. Work done by these firms on new construction is often subcontracted, but repair and remodeling work will often be contracted directly with the building owner. Examples of businesses under Specialty Trades are those involved in building foundations, framing, roofing, siding, plumbing, electrical wiring, painting, and flooring.

Heavy Construction comprises mainly construction of civil engineering projects, including highway and bridge construction, and construction of utilities such as sewer, gas, and power lines. Firms

specializing in trades primarily used in civil engineering projects are classified in Heavy Construction, rather than Specialty Trades. Ownership of the firm may be relevant to the classification. Government employees, including transportation department workers, are counted in government employment and not in construction. Similarly, workers employed by utility companies to build or maintain utility systems are classified as employees in the utility industry, not in construction. Only utility work that is subcontracted to outside firms is classified as Heavy Construction.

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In order to be classified as construction, work must be done at the construction site. For example, production in a factory of wooden windows to be installed in buildings at other locations would be classified as manufacturing. If the same windows were built on site, the work would be classified as construction. Other examples of manufacturing related to construction include making trusses, milling of rebar for reinforced concrete, and production of concrete blocks.

Finally, not all work done on buildings is considered construction. Carpet cleaning, janitorial work, and landscaping are all classified in services under Building Services.

For a breakout of employment among the three major construction subsectors, see graph on page 8.

Note: This article was originally published in the Oct. 16, 2008, issue of Arizona Workforce Employment Report.